USDA IMAGERY PLANNING & COORDINATION MEETING

December 6-8, 2011

Tuesday, December 6, 2011

Welcome

Ron Nicholls, Director, APFO.

Welcomed all attendees to the meeting, discussed the need for all the stake holders to continue to promote and develop GIS initiatives.

Planning Meeting Objectives

Kent Williams, Deputy Director, APFO.

The primary purpose of this meeting is to review prior year imagery projects and plan for the upcoming year.

Agriculture imagery programs operational for 35 years.

- 1977 agreement between ASCS, USFS and SCS for "contracting, inspecting and accepting of all aerial photography projects > 100 square miles".

Coverage of USDA imagery programs:

- 5 cycles (CONUS) of ASCS aerial photography.
- 1 cycle NHAP.
- 2 cycles NAPP.
- 7 cycles of nation forest system.
- 3-4 cycles of NAIP.

Special projects:

- USDA imagery planning and coordination.
- Internet web imagery services.
- Digital cameras.
- Budgets – designed for a 3 year CONUS acquisition with possible additions of PAC Basin. Currently evaluating funding participation of federal and state partners in response to funding trends.

USDA OCIO Activities

USDA Streamlining Initiative - Stephen Lowe (APFO Bus Modeling Session v3 (1272011).pptx)

USDA Enterprise Geospatial Strategy - Stephen Lowe (APFO Strategy Pres v2 (1262011)SL.pdf).

- Geospatial center of excellence.
- Members will come from major stake holders.
- Portal/Cloud based.
- Tasked to streamline and develop efficiency throughout USDA/GIS community.

USDA Remote Sensing

Remote Sensing Report – Glen Bethel.

FAS SIL usage statistics – Glen Bethel (Bethel_FAS_SIA_slides.pptx).

- SIA supported two satellite imagery contracts with four satellites covering the conterminous US.
- SPOT 4 (20 meter) & SPOT 5 (10 meter) imagery.
- Deimos-1 & UK-DMC2 (22 meter) imagery.
- $14 per image downloads by EDC.
- $ Not given to USGS timely.
- SPOT only loosely geo-referenced.
- FS downloads the most.
- Data paid by the Washington office for the field, but everyone gets it for free (SPOT).
- SPOT buy is the best thing USDA has done. (comments by Bill Belton)

Medium Resolution: Rapid Eye, Landsat 5/7, new mission - Glen Bethel (Bethel_Landsat*_5_Sentin_Agsat.pptx).

- Launch readiness date is December 1, 2012.
- Launch will likely slip to date between January 15 and February 15, 2013 due launch vehicle manifest conflicts with other satellite missions.
- TIRS environmental testing underway at GSFC.
- Current delivery date to orbital is 26 January, 2012.
- Spacecraft ready for observatory integration at orbital.
- OLI to spacecraft mechanical integration began Oct. 18.

- Observatory on schedule for September 2012 shipment to Vandenberg Air Force Base launch site.
- Ground system development is going well.

USDA Geospatial Activities

Shirley Hall (Shirley_NDOP_FGDC_subcmtee.ppt)/

Tony Kimmet (usda_ndop_update_dec2011_tkimmet_v1.ppt).

- USDA coordination with NDOP/FGDC.
- NDOP provides recommendations to the FGDC secretariat and coordination group.
- Responsible for developing, promoting and executing a national strategy for acquisition or development of ortho-imagery for federal agencies while creating and utilizing. partnerships with state, local, tribal and private organizations.

Scope:

- Creating partnerships with federal, state, local governments, tribal and private organizations.
- Assuring availability and public access to digital ortho-imagery.
- Investigating, evaluating and promoting new technologies.
- Performing cost benefit studies.
- Supporting coordination and standards.

Objectives:

- Coverage for all 50 States, Puerto Rico, the Virgin Islands, and other US territories.
- Annual plan for on-going and planned activities.
- Establish variable length cycles that support federal requirements and coordinate with state programs.
- Open source, non-proprietary imagery types and formats.
- Maintenance and archiving of imagery as part of the national database in the public domain, where possible.
- Investigate emerging technologies, including but not limited to airborne digital and satellite sensors, LIDAR, IFSAR.
- Coordinate federal and state agency imagery requirements.
- Support use of aerial or satellite acquisition strategies.
- Be aware of federal and state emergency operations requirements and facilitate data use in time of emergency.
- Objectives accomplished through steering committee and sub groups.
- Program management subcommittee.
- Acquisition management subcommittee.
- Technical management subcommittee.

- Subcommittee opportunities in FGDC.
- Foster NDOP member agency growth and diversity.
- Further facilitate, communicate and coordinate digital ortho-imagery requirements.
- Increase visibility and capacity of NDOP.
- Imagery For the Nation (IFTN) no money behind it.

Imagery Compression Issues:

- NAIP 4 band - CPM 3 band issue.
- Web map service remote sensing analysis access to other data sets.
- Multi-spectral imagery (NAIP 4 Band, Satellite 4/8+ etc…).
- Map services (I.e. Citrix or other systems).
- Analytical modeling – compare compressed vs. non-compressed (GeoTIFF).
- Pros and cons of licensed formats (MrSID, ECW) vs. non-licensed (JPG2K).

Geospatial data delivery coordination between agencies:

- Cloud practices (public, private facing).
- Commonality of software/delivery practices.
- Specification development and coordination.
- Lists of what geospatial products/services are available.

Camera/Sensor Characterizations:

- Focus on digital camera sensors that are commonly used on 1 meter or higher acquisitions.
- New sensor could be an issue with awarding contracts.

NAIP 2012 specifications changes – horizontal accuracy.

NSGIC has asked NDOP-TMS add 3" and 6" high resolution ortho-imagery to NDOP/IFTN specifications document.

FSA-APFO has asked NDOP-TMS to research feasibility of tone balancing 4 band ortho-imagery.

USGS-EDC will investigate automated SPOT imagery processing for ortho-rectification and pan-sharpening.

USGS briefing on cloud services collecting information and doesn't know what they are going to do private & public cloud services on product and data availability.

SPOT- ortho data streaming EDC, loosely geo-referenced.

USGS –camera calibration closing lab.

USGS funding reduced – NO digital camera calibration & certification.

Private industry is in better shape to do calibrations.

No longer will supports IADIWIG – NDOP/NDEP be responsible.

Budgeting/Fiscal Issues

FSA budget reimbursable issues - Denny Skiles (Budget Issue v5.pptx).

The Financial Management Modernization Initiative (FMMI) project is designed to modernize the departmental and agency financial and administrative payment and program general ledger systems.

Implementation:

- Provide a commercial-off-the-shelf (COTS) enterprise resource planning (ERP) solution to replace the legacy mainframe systems with an advanced, web-based financial management system.

Objective:

- To improve financial management performance by efficiently providing USDA with a modern core financial management system that provides maximum support to the mission.
- Not engineered for the way APFO does business.
- Super and direct funded.
- Reimbursable fund – anything that is product/services that isn't an FSA mission.

Bill Belton is concerned due to 1977 agreement which requires FS to contract thru APFO if it is 100 square miles. Should there be an admin fee because of this? No more funds to give, might mean less imagery for FS.

- APFO has the expertise that is why FS likes us to contract/inspected through APFO.
- APFO – not charging appropriate admin fee, what can we do to help with the gap?
- Relook at 1977 agreement.
- Develop different levels of services.
- Inspect only certain products or a random sampling like 10%.
- No storage.

Administrative Fee - Geoffrey Gabbott (Budget Issues v5.pptx).

Reason for gap in Resource projects fees vs. cost:

- More products delivered with digital projects, lower contract amount for digital (lower admin fee), and inspection time increased for digital projects.
- Variable rates depending on project (8% film, 15% digital).

FY2013 figure out how to fix the gap – less inspection, storage etc:

- Hard drives; add cost to agreement.
- Establish multiyear contract w/FMMI.
- Cost reimbursed same year (even multi-year; match the work in the year it is done).
- Valid 1977 agreement between FS and NRCS.

Cost Share Agreements - Bridget Barlow (Budget Issues v5.pptx).

- Interagency Service Agreement needs to be filled out up front and signed before submitting to APFO.
- Extend duration period through funding expiration date.
- MO number (Obligation Document Number) and CAN number (Common Agreement Number).
- ALC number (Agency Location Number) identifies agency within FMMI & IAS systems.
- TAS number (Treasury Account Symbol) identifies which account the funds reside in and defines the type of funding (fiscal-year, multi-year, or no-year).
- All numbers must be provided at the time the agreement is submitted to APFO for signature.

USDA Activities and Planning

USDA APFO Contracting Activities- Geoffrey Gabbott (APFO Contracts (Gabbott).pptx).

- Code of Federal Regulations.
- USDA agreement between FSA, NRCS, and USFS.
- FS Geometronics handbook on remote sensing/acquisition of aerial photography.

$27,685,229.40 – total amount of aerial photography & IT contracts awarded.

- Provided procurement services to support FSA and partnering agencies with current NAIP imagery.
- NRCS with high resolution NRI and Stewardship Lands aerial photography.
- U.S. Forest Service with film aerial photography and high resolution digital imagery.
- APFO and WDC IT related requirements.

$1,281,837 – total number of square miles of aerial photography contracted.

- Contracted 1,175,517 square miles of NAIP imagery.
- Contracted 91,507 square miles for NRCS programs.
- Contracted 14,827 square miles of U.S Forest Service lands.

$317,061.93 – reimbursements through administrative fees.

- Through inter-agency service agreements with partnering agencies, reimbursements for APFO's services totaled $266,744.38 from NRCS and $50,317.55 from U.S. Forest Service.
- 30% of all contracts were awarded to small business concerns.
- Solicited sources for procurements under a 100% set-aside for small business concerns where applicable. This resulted in small business concerns receiving 30% of the overall total contract dollar amount, with large businesses receiving 51% and Canadian (NAFTA) Businesses receiving 19%.

2011 NAIP Contract Review - John Mootz.

- 2011 – 100% acquired by October 11, 2011.
- $16.5 M awarded.
- End of 5 year IDIQ.
- All 4 band products.

Issues:

- White Sands, Dugway Proving Grounds, Aberdeen Proving Grounds prohibited and blocked out.

USDA Activities & Planning – NAIP

Review 2011 NAIP survey results - David Davis (NAIP Imagery Requirements Survey Dec 2011 Final.pptx).

For all agencies except NRCS the majority of respondents indicated they do not need media copies of their imagery; however 65% of FSA State GIS Specialists/Coordinators indicated they still needed media copies of their imagery. Of those respondents that indicated they needed media copies, the reasons given were, for use during network outages, general backup, and field work.

Respondents indicated that CCMs are still an important product. All agencies that need a copy of the data wanted DOQQs while only FSA and NRCS had a majority that needed CCMs.

For FSA, grain storage facilities seem to be the size/spatial resolution cutoff regarding what needs to be clearly recognizable on the imagery; however upwards of 20% of respondents indicated they also need to see single trees. Based on the "other" responses to the program

specific questions, the smallest objects that need to be clearly recognizable are hay bales, single trees, wellheads, and grain bins. For non-FSA the responses included: ½ to 1-meter objects, campsites, ATV route width, sage brush plant, and a mushroom.

69% of FSA respondents indicated they need imagery every year where as non-FSA agencies indicated 1 to 2 year preference.

For FSA the vast majority of respondents indicated full county coverage was "very important", and many indicated that seeing adjacent counties is important as well, regardless of whether they are in the same state or not.

Respondents indicated quality of the imagery is as important as horizontal accuracy of the imagery. Both were predominately rated "very important".

Respondents indicated accessibility and speed of use of the imagery are both "very important".

Currency of the imagery, maintaining credibility with the customers, and time savings were also all rated as "very important".

Wide variety of responses from the different agencies regarding how quickly they need to receive the imagery. FSA had most responses for 10-30 days, where as non-FSA agencies had most responses in the 30-120 day range.

For FSA, almost 99% of respondents feel that knowing the year, month, and day of acquisition is enough detail; 1% felt they needed to know the hour of acquisition.

Most of the agencies indicated that an accuracy specification of 6 meters to true ground is sufficient. Of those respondents to said no, the majority would like to see a 2 meter to ground accuracy specification. 2-m was the highest accuracy to choose from.

Variety of responses regarding historical imagery. FSA responses were mostly in the 3-10 year range with 28% selecting "as far back as possible" where as non-FSA agencies selected 61 – 74% wanting "as far back as possible".

The ability to share imagery with Federal, State, and Local agencies, as well as with producers, without concern for copyright or licensing is important to all agencies.

All agencies noted difficulties to their programs if FSA imagery was not available. Over 80% of FSA respondents indicated that they would have to increase field work to accomplish their jobs; 39% indicated they would seek out other imagery sources to accomplish their work.

83% of FSA respondents preferred natural color (NC) imagery over other options. Order of preference for all agencies was: Natural Color**,** 4-band**,** CIR, >4-bands

Wednesday, December 7, 2011

USDA Activities & Planning – NAIP

NAIP – Quality trends and summary- Aaron Eckert (Aaron Eckert NAIP Imagery Accuracy.pptx).

All DOQQ tiles shall reflect a 95% confidence level of the well-defined points tested fall within 6.0 meters of true ground.

NAIP – Program metrics - David Wheeler (3yearTrend.ppt).

NAIP imagery continues to improve because of contractor and APFO quality management approaches:

- Each State to look similar from year to year.
- Product stabilizing - Last 3 years very consistent.
- Problem Tracker – customer issues review and fix.

NAIP Usage - David Parry (NAIP Distribution FY10.pptx).

Collection of information from APFO and the Geospatial Data Gateway (GDG) about NAIP imagery distribution can be used for FSA identification of usage trends and value to the public. Quantity of FY2010 CCM Downloads by Customer Email Extension – Vast majority are from .com and .net while a significant amount are from .gov and .edu extensions and a small amount from foreign extensions.

- 2011 over 200,000 downloads.
- Improvements to the download capability of larger file sizes up to 4 G.

Other Distribution Sources

The NAIP distribution information provided are from known sources such as the GDG and APFO. It does not include information regarding other NAIP distribution from private or commercial and state or local entities. You may not be aware how much NAIP imagery has been integrated in your daily browsing of the internet. USDA currently has several agreements to provide imagery which you may see without even noticing its NAIP. These include Google Earth and Maps, NASA World Wind, and ESRI map services.

Lessons Learned - Kent Williams (NAIP Lesson Learned.pptx).

- Partnerships work.
- Jointly funded as a national program.
- 15% increase in fed cost share for FY12.
- Cost share with states is tough.
- Variable schedule due to variable FSA funding.
- FMMI constraints.
- Focus on buy-ups from states.
- Base changes and specifications on user needs.
- User surveys.
- Requirements surveys.
- Problem tracking.
- Review proposed changes with partners.
- NDOP.
- USDA planning meeting.
- More GCPs.
- New specification.

New NAIP IDIQ Contract – Schedule, Deliverables and Specifications - John Mootz (2012 NAIP planning (Mootz).pptx).

- Industry day: early January.
- RFP released: early February.
- Source selection: mid March.
- 2012 NAIP contract is scheduled to be awarded April 2012.
- Contract length – single year with 4x 1 yr ext.
- Number of contractors – TBD.

Standard Product:

- 4-Band GeoTIFF DOQQ.
- 1m GSD resolution.
- State-based seamline shapefile.

Expected Changes:

- CCM no longer primary product – available 30-60 days after flying season.
- ½ meter buy up.
- Multi spectral.

- Horizontal accuracy.
- Possible DEM corrections.

Will not be included:

- State based DEMs.
- Stereo products.
- LiDAR or IFsar.

Action Item:

- Require all source usage statistics.
- Develop outreach/marketing plan.

Imagery Distribution/Access

Image Services, Provisioning -Kent Williams (imagery distribution.pptx).

- Imagery distribution via public and government portals.
- Public portal.
- Most recent 1 meter coverage not for widespread use.
- Pay for product – CCM and QQ.
- Government portal.
- USDA Geospatial Data Gateway.
- Solicitation attempt on CCM downloads.

STEPHEN LOWE

This is a high level political geospatial mandate to develop the center of excellence:

- Community will evaluate.
- Clarifying factors.
- Business cycles.
- Congressional funding cycle.
- Spatial data prep.
- Geo work flows.
- Product services testing.
- Life cycle consumption.
- Archival requirements.
- Capacity management.

- Network analysis.
- Subject matter expertise intervention.
- Surge demands resulting from mandates.
- Pilot project to load Forest Service's Imagery from APFO onto the cloud for functionality.

APFO Activities & Planning – NRI/SLI

2011 Small Area Aerial Photography Contract –NRI & Stewardship Lands - Jacque La Croix (1-APFO Contracts (SAC-IT-SAT).pptx).

Accomplishments:

- Successfully acquired over 15 years of imagery.
- Established program with specific requirements.
- Planned for the 2012 option Year.
- Task order RFP for film and scans.
- Opportunity for digital projects.
- Internal hard drive delivery from contractors.

Challenges:

- Transitioning to digital acquisition.
- Establishing a digital replacement that best mimics the film acquisition performance and costs.
- Taking advantage of latest technologies (sensors) and incorporating them into a long term contract.

2011 Contract Awards:

- NRI project summary CONUS, Hawaii, Puerto Rico & U.S. Virgin Islands.
- SLI project summary -CONUS and 2 exposures in Hawaii.
- Digital projects summary- ARS NRI sites & NEAP easement.
-

NRCS Activities and Planning – NRI/SLI

NRCS -2011 NRI/SLI Contract Review, Agency Activities & Imagery Requirement Survey - Dorsey Plunk (2011_USDA_Planning_Mtg_plunk.ppt).

- NRCS Stewardship Lands Imagery (SLI) has an agreement with participating wetland owners to maintain land in its natural state. Once restoration has been implemented all enrollments will be monitored at least once every 3 years through an onsite visit. The site may be monitored through offsite or remote sensing methods the other 2 years. Aerial Photography is acquired every year regardless if an onsite visit is scheduled.

- Reviewing feasibility use of digital imagery vs. film, digital possibility cost prohibited, but film availability is drying up.
- 2012 NRI Sample 71,023 includes 1,400 range sample and 2,000 BLM samples.
- Bio-assessment - identify linkage between remote sensing classifications and on-site biological indicators.
- Restricted sites – Utah, Colorado, and Maryland.
- Digital High Resolution Project – AZ, ID, OK, TX and WY 55 segments each segment contains 2 points.
- National Easement Assessment Project (NEAP) pilot – NC 5,390 acres 16 easements 8cm and 15 cm.

NRCS -2011 NRI/SLI Contract Review, Agency Activities & Imagery Requirement Survey – Tony Kimmet (usda_nrcs_agency_dec2011_tkimmet_final.ppt).

- NAIP to be used for CDSI conservation data streamline initiative.
- Alaska DEM issue, push for LiDAR or IFsar.
- Hawaii covered 8 islands with high resolution 8 band imagery.
- Completed 98% of all pacific basin imagery - all data is Satellite One Meter or higher resolution.
- NRCS's priority interested is the best available pan sharpen imagery for a given location/tile in Alaska.

NASS Activities & Planning

NASS- Imagery use and requirements -Jeff Bailey (NASS_Imagery_Uses.ppt).

NASS Area Frame Survey

Purpose: Estimate major crop acreages for June 30 release date and measure under coverage of list surveys, primary customer is commodities market.

- Sample size: ~11,000 typically 1 square mile with a 5 year cycle.
- Advantage: complete frame giving all farms a chance to be selected.
- Disadvantage: expensive since with personally enumerate costing > 5 mil.
- CropScape Portal is not software depended and is open source.

APFO Activities & Planning Resource

2011 Resource Contracting Review - Michelle Clifford (USDA Resource Contracts [1].ppt).

- Cost of Resource film dropped in price while digital remained stable.
- 2011 all projects flown 100% which included 2 film and 6 digital.
- Exploring inspection process changes to maximize efficiencies.
- Introduction of product warranty.
- Establish standardize 8-bit color corrected stereo imagery and CCM.
- Specification changes.

Stereo Block Files:

- Contractor difficulty in generating a file that works upon load (software).
- Zooming in and maintaining stereo.
- Stripping geotiff header tags; spatial reference remains.
- ERDAS help ticket initiated.
- Define image reference to reduce number of images per block file.
- File for each AT block? File per drive?

Ortho Issues/Specs:

- Reduced buffer from 300 to 100 meters.
- Feathering and automatic seamline generation.
- Option for manual seamline adjustment (2011 price added $40/QQQ).
- Add seamline shapefiles.

2012 IDIQ for Resource:

- Refining contract specifications.
- Future projects determined by funding levels.
- Establish range of Resource imagery requirements.
- Possible additions of elevation data.

Discussions:

- ADS sensor strips – image and file size.
- Reduced 3D effect in stereo analyst vs. frame based.
- White Paper – James Monty, RSAC/Red Castle.
- Working w/Northwest for customer contact to gain workflow to optimize ADS stereo viewing.
- Can APFO correct 22,535 square miles stereo imagery for Region 4 – currently customer is unable to view in stereo with files that were delivered under the contract.

Thursday, December 8, 2011

USFS Activities & Planning

USFS- Agency Activities and Imagery Requirements Survey -Bill Belton (2012 FS Update for USDA Planning Meeting.ppt).

- Enterprise raster data management.
- RSAC is developing strategy.
- Interviews and survey process with 'field' units approaching completion.
- Report is planned for completion early next CY.
- Funded at national level.
- Requesting $2,100,000 starting in 2012.
- $1,900,000 to NAIP.
- $ 200,000 for Alaska and other projects.
- 2012 regional plans.

Region 1 – Northern Region:

- No planned aerial photography.
- 1 small LiDAR project Clearwater NF, handled by forest.

Region 6 – Pacific Northwest:

- Will have some aerial photography, request letter going out this month.
- 1 small LiDAR project Deschutes NF.

USFS- Region Activities and Imagery Requirements Survey R3 – Bart Matthews (USDA Planning Meeting 2011.pptx).

Projects:

- APFO created an 11 years archive of Region 3 Forest Service projects, hosted by Forest Service.

- 2010 last film project, not ortho-rectified due to funding
- Worked on emergency response projects
- Develop a standard for large format photography

R3 – Tom Mellin - Remote Sensing

- Remote sensing issues – licensing restrictions on SPOT imagery thru HDDS made it harder to share with forests.
- Gap in Landsat coverage will be problematic.
- Forest Service may take over Autonomous Modular Sensor from NASA.
- NAIP CIR and Resource Photography are key to remote sensing; CIR standards would help ensure consistency and usefulness.

R2 – Melinda McGann (RockyMountainRS_Dec2011.pptx).

- 2012 they currently are budging $220, 000 for 3 forests, still under a CR, if there is 25% reduction in budget they will lose the funds.
- All forest are digital except for 2 that they will have film scanned.
- Change detection monitoring and how they are using the imagery in the field.
- Use of historical film – scan prints if needed.
- Imagery used in court cases.
- User survey to drive requirements.
- Purchased 2 planar stereo monitors – enables stereo viewing.

R10- Mark Riley (R10_RS_update_USDAPlanningDec2011_Riley.ppt).

- Current contracting
- Complete coverage 2009-2011 of Tongass and Chugach- Digital Orthoimage, including stereo blockfiles.
- Current statewide IDIQ for P- and X-band ifSAR DEMs ($200k for 1-degree cell).
- Future contracting.
- Develop new requirements for elevation models.
- Request for Information (RFI) – to generate more competition, determine interest, increase awareness.
- Refined contract specifications – to better define expectations and consistency.
- IDIQ – to accommodate year end funds and provide AK continuity.
- Good working relationship with Region 10 and APFO.

USDA Contracting Activities & Plans.

APFO Elevation Feasibilty Study – Joan Biediger (APFO Elevation Feasibility Study.pptx).

APFO conducted an elevation feasibility study and determined that there are three possible outcomes.

Major Findings:

- If adequate technical expertise and infrastructure are not in place elevation data may be delivered with no way of inspecting or ingesting the data causing delays to the customer.
- IT infrastructure and storage capacity will require significant upgrades to properly process and store elevation data for Scenarios 2 and 3.
- APFO would need at least 12 months to prepare to contract for elevation data if the required personnel were already in place.
- Validation scripts and inspection tools will need to be created by IT personnel for scenarios 2 and 3.

Conclusions:

- Contracting for elevation data is a unique opportunity for APFO.
- APFO could fill an existing need and establish itself as a technical authority on data which can help support imagery programs such as NAIP and Resource Photography.
- Contracting for, receiving, ingesting, inspecting, archiving, and distributing elevation data is feasible, but requires the correct technical knowledge, a certain level of dedicated staffing, infrastructure and a comprehensive understanding of the end customer's requirements.

Elevation Contracts – Current Activities & Requirements Survey – Geoffrey Gabbott (discussion).

Questions of contract viability, budget issues, Non-FSA procurement process does not allow for reutilization of residual end of year funding.

New USDA Contract for Commercial Satellite Imagery – Jacque LaCroix (1-APFO Contract (SAC-IT-SAT).pptx).

- Satellite imagery project.
- Contract type: *Proposed:* Blanket Purchase Agreement(s).
- USDA wide access.
- Maximum 5 year duration.
- APFO will conduct a survey to determine usage requirements, product types, funding, and any contract vehicle specifications.

Note: Glen Bethel discussed Polar Geospatial Center obtained funding for future imagery for all Polar Regions.

Imagery for Disaster Response

Imagery Sources –Glen Bethel (BETHEL_Disasters.pptx)

Four types of federal disaster designations:

- Presidential major disaster declaration.
- USDA secretarial disaster designation.
- Farm Service Agency (FSA) administrator's Physical Loss Notification.
- Quarantine designation.

Total of 224 US disasters, with 2 international disasters utilized: civil satellites, commercial satellites, foreign satellites, and aerial imagery.

- An EarthExplorer account to download restricted/licensed data/ imagery is required.
- Working with FEMA.
- FEMA posts products to the Homeland Security Information Network (HSIN).
- Starting Dec 8, 2011, FEMA will use the Geospatial Platform (www.geoplatform.gov) share data.
- Go to: https://geo.data.gov/geoportal/catalog/main/home.page.
- At the top, click register.
- Once registered, send Clive Reece (creece@esri.com) your user name and desire to be added to the Emergency Management group.

FY11 Disaster Response- Mississippi River, Missouri River, Hurricane Irene, Bastrop Texas Fire –Dorsey Plunk (2011_Disaster_Response_plunk.pptx).

NCGC developed timely disaster response data sets for USDA using Microsoft Silverlight and image services.

- Applications 1 day turn around, available only on USDA networks.

Imagery used from SPOT and Landsat.

- MS - 35 Landsat and 126 SPOT.
- MO - 59 Landsat and 59 SPOT.
- Irene - 17 Landsat, 108 SPOT, & 414 NOAA photos.

MO River flooding – Dave Davis (SPOT_MO_NE_v2.pptx).

Pilot project to determine APFO's ability to produce geospatial products in support of national disaster response obtained SPOT imagery acquisition and developed geospatial products for NE and MO FSA used to assist in disaster claims for producers.

- MO River flooding in 2011.
- FSA state offices for MO and NE requested an AOI is about 1000 miles x 10 miles.
- FSA wanted acquisition between mid Oct through end of Nov.
- APFO utilized SPOT satellite imagery.

- Customer requested deliverable formats: Image services and data on external drives.
- Project is still being conducted by APFO GSB.

USDA Geospatial Activities (cont. from Tuesday)

USDA will develop a Geospatial Center of Excellence, design to streamline, consolidate and exploit geospatial product. Work groups will be comprised of subject area experts from all USDA agencies tasked to develop future initiatives. Work groups will be virtual utilizing portal technology.

ESRI COTR transition and 2013 contract negotiations – Chris North/Laura Stretch (LauraStretch_USDA Imagery Mtg 2011.pptx).

- USDA community analyst and business analyst environment.
- Working towards on-premise platform.
- Processing USDA datasets into the software environment.
- Currently related to renewable energy.
- Along with the Esri business analyst data: demographics, sales, market, tapestry, etc

GPS Interference: Update on LightSquared Broadband Proposal & FCC Actions – Dan Good (GPS_USDA_imagery_mtg.pptx).

Presidential mandate to build out a nationwide 4G ATC network (to cover 260M in U.S. by 2014)

USDA impacts:

- Approximately $60 million in assets, half are high precision equipment.
- Safety of life (LEI, forest fire management).
- Aerial imagery acquisitions (NAIP, SAC, Resource).
- Estimated $14 – 30 billion in GPS derived benefits annually from precision agriculture.

Control Point DB

Status of FSA Ground Control Database – Dave Davis/Joan Biedeger (2011_absolute_control finaltestanima.pptx).

- 2012 APFO plans to update ground control point map layer.
- Over 38, 000 points and growing (over $10 million dollars estimated in value if purchased from a commercial vendor).
- Received GCPs from many federal, state, tribal, & local government agencies and organizations.
- Coordination is ongoing and several states provide new GCPs on a regular basis as part of their state imagery programs.
- Sharing points – government only, if points are approved to share.

Historical Aerial Photography

Status of APFO "Vault Project" – Kent Williams (Historical AP.pptx).

- Scanning APFO historical film is in planning stages.
- Upgraded scanners, capable of doubling current production full roll scanning.

Wrap Up

Summarize Meeting and review Action Items – Kent Williams.

2010 Action Items still pending:

- 2012 IR band –RSAC and Region 3
- NAIP product deliverables – CCMs and possibility of delivery through web services, location APFO vs. vendor site, access and contract issues
- NAIP vendor analysis
- Archiving costs- Stephen Lowe

2011 Action Items:

- Organize a teleconference for LIDAR/elevation with interested agencies - John Mootz.
- Check FAS on satellite collection contract to see what they have available (contract) if that can be the model for new contract- done.
- Develop survey of commercial satellite imagery requirements- La Croix.
- Determine financial commitments from agencies for satellite contract– La Croix.
- Determine overhead costs for reimbursable projects and establish appropriate fee for FY13.
- Get with USGS for more info on camera cert for new digital sensors ask NDOP tech sub.
- CIR standards – Bart to give info to Mootz.
- Develop best practices.
- Develop system to track NAIP usage - David Parry.
- Do another round form NSIGIC.

- Webinar from Laura.
- Post Wallow Ortho’s on the portal - Bart Matthews and Stephen Lowe.
- NRCS involvement with elevation contract – Tony to ask Tommy.